

# 1995 INDEX

## A

Agrotricum, wheat/grass hybrid, Jan-13  
ALERT, advanced insect-rearing technology, May-22  
Alfalfa, *Sclerotinia* resistance, Dec-16  
Animal welfare, alternatives to live animals in research, Feb-4  
Apples, better storage methods, Feb-21  
Apples, calcium hikes quality, Apr-9  
Apples, germplasm repository, Mar-23  
Aquaculture  
catfish disease test, Mar-9  
yeast pigment for salmon, Dec-21  
ASPIRE, biofungicide, Jun-23

## B

Beans  
breeding better, Sep-22  
golden mosaic virus, Apr-23  
rust resistance, Feb-20  
Beef, tenderness defined, Mar-20  
Bees  
dispense biocontrol virus, Jan-23  
Varroa and tracheal mites, Jun-18  
BIO-SAVE-11, biological fungicide, Jun-23  
Biocontrol  
antimicrobials from spices, Nov-10  
ASPIRE and BIO-SAVE-11, Jun-23  
*Beauveria* battles whitefly, May-16  
bees spread biocide, Jan-23  
boosting plants' virus resistance, Sep-18  
breeding corn rootworm resistance, Aug-13  
coordinated areawide IPM, Jul-4  
fungi yield insecticides, Jan-20  
fungus fermented/granulated, Jun-20  
gonad-specific virus, Aug-23  
lady beetles gobble aphids, Mar-4  
methyl bromide alternatives, Jan-14  
mexfly trap improved, Aug-20  
pheromone confuses cranberry fruitworm, Dec-15  
pirate bugs save stored grain, Mar-19  
predatory mites, Apr-23  
protein inhibits fruit rot, Dec-14  
flies decapitate fire ants, Feb-23  
sprayed-on beneficials, Jun-23  
SureDye curbs fruit flies, Feb-23  
*Thanasisimus* attacks pine shoot beetle, Dec-12  
trap for pepper weevil, Apr-10  
virus curbs cotton pests, Oct-23  
Blueberries, highbush Chandler, Sep-23

## C

Calcium sprays for apples, pears, Apr-9  
Calcium, racial differences in absorption, Dec-21  
Cantaloupe, sweetness defined, Mar-23  
Carambola, cold treatment protects, Mar-22, Dec-21  
Carbon dioxide, effects on agriculture, Apr-4  
Casaba, mildew-resistant, Jan-23

## Cattle

coumaphos dip for ticks, Apr-15  
grazing ponderosa pine, Jan-23  
health research, Feb-4, Dec-2,4  
Cherries, buckskin disease, Sep-21  
Chickpeas, blight-resistant, Apr-8  
Citrus, reducing bitterness, Aug-22  
Citrus waste, for ethanol, Jun-10  
Conservation tillage  
cover crops for no-till, Aug-16  
earthworms increase with, May-18  
for the Palouse, Apr-16  
Corn, prototype accession catalog, Jan-23  
Corn, resists armyworm, borers, May-23  
Cotton  
breeding weevil resistance, Nov-21  
cottonseed for young bulls, Mar-23  
ginner's handbook revised, Jul-22  
ginning efficiency, Jan-11  
virus controls bollworm, Oct-23  
Coumaphos, disposing of tick dip, Apr-15  
Cover crops, for no-till in winter, Aug-16  
CRADA  
500th agreement signed, Oct-23  
ag wastes remove toxic metals, Sep-23  
ARS' highlighted on Internet, Jun-23  
corn pest resistance, May-23  
I.D. rust resistance markers, Apr-23  
in-ovo Newcastle vaccine, Nov-16  
on *Beauveria bassiana* uses, May-16  
rain forest chemicals explored, Oct-23  
spraying-on beneficial insects, Jun-23  
to make dextran sugars, Jun-23  
wheat pest resistance, May-23  
Cryopreservation, of hazelnuts, Apr-22  
Cryptic species, techniques to I.D., May-4  
Cucumbers, more beta carotene, Nov-13

## D-E

Dairy, new products from ERRC, Oct-10  
Dairy cattle  
Holsteins world champs, Jul-23  
more milk with less feed, Sep-16  
Dietary survey, "What We Eat in America," Apr-23  
Diets, purified for lab rodents, Jun-21  
DNA, improves insect I.D.'s, Feb-12  
DNA fingerprinting  
the process, Feb-14  
to classify organisms, May-4  
to distinguish pea types, Nov-18  
Dryland agriculture  
plant survival secrets, Mar-12  
wheat rotations, Feb-19  
Earthworms, nature's no-till plow, May-18  
Electroantennography, how insects smell, Jan-12  
Embryo rescue, germinating old seed, Mar-10  
Ethanol, from citrus byproducts, Jun-10  
Databases, models, systems  
AGNPS tracks water pollutants, Feb-22  
ARS pesticide database, Nov-23  
calculating stored-grain risks, Jun-22  
Chalcid Corner for wasps, May-8

computer maps track animals, Aug-23  
Corn-Base, computerized accessions, Jan-23  
food composition database, May-12  
global change/hydropower, Nov-23  
GLYCIM models soy crops, Jan-23  
MINIMO estimates soil nitrogen, Oct-9  
modeling aids animal research, Feb-4  
research synopses on Internet, Jun-23  
RUSLE for soil erosion, Aug-8, Sep-11

## F

Fantesk, versatile corn/soy product, Sep-12  
Fat, poultry, feed reduces, Feb-23  
Fat, supercritical fluid to extract, Jan-18  
Fertilizer, fine-tuning nitrogen, Oct-9  
Food, composition data computerized, May-12  
Food safety  
controlling *Escherichia coli*, Nov-10  
*E. coli* 0157:H7, Jul-9  
new microbial controls, Nov-10  
test kit finds fungicides, Aug-23  
Foot-and-mouth-disease research, Dec-4  
Forage  
agriticum for grazing, Jan-13  
drought-tolerant grasses, Aug-13  
fall seeding of alfalfa, Dec-16  
pine needle toxin, Jan-23  
sheep graze Centennials, Jun-2, 4  
Forum  
For Economical, Abundant, and Varied Fruits, Jan-2  
Animal Health Programs in ARS, Feb-2  
Biosystematics: Putting Pests in Their Places, Mar-2  
Carbon Dioxide and the Human Community, Apr-2  
Improving on Linnaeus, May-2  
Letting Go of Certain Myths, Jun-2  
Food Security: New Tools and New Teamwork, Jul-2  
Getting to the Root of Wheat Take-All, Aug-2  
Cooperation Crosses Our Southern Border, Sep-2  
Forming a Global Plant Genetics Insurance Policy, Oct-2  
Green Remediation: Letting the Earth Heal Itself, Nov-2  
An Island Fortress for Biosecurity, Dec-2  
Fruit, better light for sorting, Jun-19  
Fruit, rot reduced by fruit protein, Dec-14  
Fruits, tropical and subtropical, Jan-2, 4  
Fumonisin, toxin mechanism, Nov-23  
Fungi  
*Botrytis cinerea* inhibited, Dec-14  
reproduced in liquid culture, Jun-20  
sclerotia have insect toxins, Jan-20

## G-H-I

Gamagrass, helps corn resist rootworms, Aug-13  
Garlic, from true seed, Feb-9  
Gene banks, for ag diversity, Oct-2, 4

# 1995 INDEX

## A

- Agrotricum, wheat/grass hybrid, Jan-13
- ALERT, advanced insect-rearing technology, May-22
- Alfalfa, *Sclerotinia* resistance, Dec-16
- Animal welfare, alternatives to live animals in research, Feb-4
- Apples, better storage methods, Feb-21
- Apples, calcium hikes quality, Apr-9
- Apples, germplasm repository, Mar-23
- Aquaculture
  - catfish disease test, Mar-9
  - yeast pigment for salmon, Dec-21
- ASPIRE, biofungicide, Jun-23

## B

- Beans
  - breeding better, Sep-22
  - golden mosaic virus, Apr-23
  - rust resistance, Feb-20
- Beef, tenderness defined, Mar-20
- Bees
  - dispense biocontrol virus, Jan-23
  - Varroa and tracheal mites, Jun-18
- BIO-SAVE-11, biological fungicide, Jun-23
- Biocontrol
  - antimicrobials from spices, Nov-10
  - ASPIRE and BIO-SAVE-11, Jun-23
  - Beauveria* battles whitefly, May-16
  - bees spread biocide, Jan-23
  - boosting plants' virus resistance, Sep-18,
  - breeding corn rootworm resistance, Aug-13
  - coordinated areawide IPM, Jul-4
  - fungi yield insecticides, Jan-20
  - fungus fermented/granulated, Jun-20
  - gonad-specific virus, Aug-23
  - lady beetles gobble aphids, Mar-4
  - methyl bromide alternatives, Jan-14
  - mexfly trap improved, Aug-20
  - pheromone confuses cranberry fruitworm, Dec-15
  - pirate bugs save stored grain, Mar-19
  - predatory mites, Apr-23
  - protein inhibits fruit rot, Dec-14
  - flies decapitate fire ants, Feb-23
  - sprayed-on beneficials, Jun-23
  - SureDye curbs fruit flies, Feb-23
  - Thanosimus* attacks pine shoot beetle, Dec-12
  - trap for pepper weevil, Apr-10
  - virus curbs cotton pests, Oct-23
- Blueberries, highbush Chandler, Sep-23

## C

- Calcium sprays for apples, pears, Apr-9
- Calcium, racial differences in absorption, Dec-21
- Cantaloupe, sweetness defined, Mar-23
- Carambola, cold treatment protects, Mar-22, Dec-21
- Carbon dioxide, effects on agriculture, Apr-4
- Casaba, mildew-resistant, Jan-23

## Cattle

- coumaphos dip for ticks, Apr-15
- grazing ponderosa pine, Jan-23
- health research, Feb-4, Dec-2,4
- Cherries, buckskin disease, Sep-21
- Chickpeas, blight-resistant, Apr-8
- Citrus, reducing bitterness, Aug-22
- Citrus waste, for ethanol, Jun-10
- Conservation tillage
  - cover crops for no-till, Aug-16
  - earthworms increase with, May-18
  - for the Palouse, Apr-16
- Corn, prototype accession catalog, Jan-23
- Corn, resists armyworm, borers, May-23
- Cotton
  - breeding weevil resistance, Nov-21
  - cottonseed for young bulls, Mar-23
  - ginner's handbook revised, Jul-22
  - ginning efficiency, Jan-11
  - virus controls bollworm, Oct-23
- Coumaphos, disposing of tick dip, Apr-15
- Cover crops, for no-till in winter, Aug-16
- CRADA
  - 500th agreement signed, Oct-23
  - ag wastes remove toxic metals, Sep-23
  - ARS' highlighted on Internet, Jun-23
  - corn pest resistance, May-23
  - I.D. rust resistance markers, Apr-23
  - in-ovo Newcastle vaccine, Nov-16
  - on *Beauveria bassiana* uses, May-16
  - rain forest chemicals explored, Oct-23
  - spraying-on beneficial insects, Jun-23
  - to make dextran sugars, Jun-23
  - wheat pest resistance, May-23
- Cryopreservation, of hazelnuts, Apr-22
- Cryptic species, techniques to I.D., May-4
- Cucumbers, more beta carotene, Nov-13

## D-E

- Dairy, new products from ERRC, Oct-10
- Dairy cattle
  - Holsteins world champs, Jul-23
  - more milk with less feed, Sep-16
- Dietary survey, "What We Eat in America," Apr-23
- Diets, purified for lab rodents, Jun-21
- DNA, improves insect I.D.'s, Feb-12
- DNA fingerprinting
  - the process, Feb-14
  - to classify organisms, May-4
  - to distinguish pea types, Nov-18
- Dryland agriculture
  - plant survival secrets, Mar-12
  - wheat rotations, Feb-19
- Earthworms, nature's no-till plow, May-18
- Electroantennography, how insects smell, Jan-12
- Embryo rescue, germinating old seed, Mar-10
- Ethanol, from citrus byproducts, Jun-10
- Databases, models, systems
  - AGNPS tracks water pollutants, Feb-22
  - ARS pesticide database, Nov-23
  - calculating stored-grain risks, Jun-22
  - Chalcid Corner for wasps, May-8

- computer maps track animals, Aug-23
- Corn-Base, computerized accessions, Jan-23
- food composition database, May-12
- global change/hydropower, Nov-23
- GLYCIM models soy crops, Jan-23
- MINIMO estimates soil nitrogen, Oct-9
- modeling aids animal research, Feb-4
- research synopses on Internet, Jun-23
- RUSLE for soil erosion, Aug-8, Sep-11

## F

- Fantesk, versatile corn/soy product, Sep-12
- Fat, poultry, feed reduces, Feb-23
- Fat, supercritical fluid to extract, Aug-18
- Fertilizer, fine-tuning nitrogen, Oct-9
- Food, composition data computerized, May-12
- Food safety
  - controlling *Escherichia coli*, Nov-10
  - E. coli* 0157:H7, Jul-9
  - new microbial controls, Nov-10
  - test kit finds fungicides, Aug-23
- Foot-and-mouth-disease research, Dec-4
- Forage
  - agriticum for grazing, Jan-13
  - drought-tolerant grasses, Aug-13
  - fall seeding of alfalfa, Dec-16
  - pine needle toxin, Jan-23
  - sheep graze Centennials, Jun-2, 4
- Forum
  - For Economical, Abundant, and Varied Fruits, Jan-2
  - Animal Health Programs in ARS, Feb-2
  - Biosystematics: Putting Pests in Their Places, Mar-2
  - Carbon Dioxide and the Human Community, Apr-2
  - Improving on Linnaeus, May-2
  - Letting Go of Certain Myths, Jun-2
  - Food Security: New Tools and New Teamwork, Jul-2
  - Getting to the Root of Wheat Take-All, Aug-2
  - Cooperation Crosses Our Southern Border, Sep-2
  - Forming a Global Plant Genetics Insurance Policy, Oct-2
  - Green Remediation: Letting the Earth Heal Itself, Nov-2
  - An Island Fortress for Biosecurity, Dec-2
- Fruit, better light for sorting, Jun-19
- Fruit, rot reduced by fruit protein, Dec-14
- Fruits, tropical and subtropical, Jan-2, 4
- Fumonisin, toxin mechanism, Nov-23
- Fungi
  - Botrytis cinerea* inhibited, Dec-14
  - reproduced in liquid culture, Jun-20
  - sclerotia have insect toxins, Jan-20

## G-H-I

- Gamagrass, helps corn resist rootworms, Aug-13
- Garlic, from true seed, Feb-9
- Gene banks, for ag diversity, Oct-2, 4

## Genes, genetic engineering

- bean rust resistance markers, Apr-23
- building plant virus resistance, Sep-18
- Endless Summer tomato, Jul-20
- germplasm repository system, Oct-8
- preserving apple germplasm, Mar-23
- potato with virus Y resistance, Jul-23
- resistance to Russian wheat aphid, May-23
- virus protection for peanuts, Aug-18
- Germplasm repository system, U.S., Oct-8
- Global climate change
  - carbon dioxide increase, Apr-2, 4
  - effects on hydropower, Nov-23
  - monitoring gases, Jun-12
- Gypsy moth, in space, Jun-23
- Hazelnuts, cryopreservation, Apr-22
- Homocysteine, and arteriosclerosis, Apr-23
- Hydroponics, using fishpond waste, Feb-10
- Hyperaccumulators cleanse soil, Nov-2, 4
- Insects

- antennae "smell" targets, Jan-12
- codling moth in northwest, Jul-4
- cold curbs carib flies on carambola, Dec-21
- cold temperature survival, Sep-22
- cranberry fruitworm mating, Dec-15
- fire ant versus parasitic fly, Feb-23
- identifying with DNA, Feb-12
- lady beetles for pest control, Mar-4
- mass-rearing *Catolaccus grandis*, Sep-5
- mass-rearing, innovations in, May-22
- medfly, malaria research, Sep-23
- Mexican fruit fly, trapping, Aug-20
- pine shoot beetle control, Dec-12
- pirate bugs guard stored grain, Mar-19
- Internet, ARS databases on, Jun-23, Nov-23

## IPM

- Arboretum cuts pesticide use, Apr-23
- areawide, against codling moth, Jul-4
- evolution of concept, Jul-8
- pepper weevil war, Apr-10
- tillage/rotation for pests, erosion, Apr-16
- whitefly control strategies, May-16
- Irradiation, for safer meat/poultry, Nov-10
- Irrigation, nationwide coordination, Oct-14

## K-L-M

- Kleingrass, timing emergence, Apr-14
- Lettuce, Salinas dominates, Apr-14
- Lettuce, Tiber resists tipburn, Apr-23
- Lipid, anti-inflammatory drug, Jul-22
- Lupin, food/feed for cool regions, Mar-23
- Meat, measuring fat-to-lean ratio, Jul-18
- Meat, more tender beef, Mar-20
- Melons, source of bland taste, Mar-23
- Methane, cattle emissions, Jun-12
- Methyl bromide, alternatives to, Jan-14
- Mexico, cooperative research with, Sep-2, 4

## N-O-P

- Newcastle disease, new vaccines, Nov-16
- Nitrogen, applying the right amount, Oct-9
- Nitrogen, fixed by plant rhizobia, Mar-16
- Nutrition, human

- boosting zinc absorption, Jun-15
- calcium absorption by girls, Dec-21
- continuing diet survey, Apr-23
- counting alcohol's calories, May-23
- fine-tuning protein needs, Jul-13
- food data standardized, May-12
- heritability of lean tendencies, Dec-20
- homocysteine in elderly, Apr-23
- immune system stresses, Jan-22
- kidney stone-oxalate link, Oct-9
- low-calorie/high-exertion regimens, Jan-22
- protein needs in elders, Jul-12
- raising HDL cholesterol, Jul-15
- recovery from weight gain/loss, Feb-23
- selenium affects mood, Oct-19
- selenium and weight gain, Oct-18
- weight loss sex-linked, Aug-14

## Onions, safe sheep feed, Apr-22

- Oxalate, bacterium degrades, Oct-9
- Peanut

- biotech virus protection, Aug-18
- blight-resistant SW Runner, Jul-10
- flavor/oil quality link, Jan-11

## Peas, germplasm collection, Nov-18

- Peppers, hot sauces are big sellers, Oct-22
- Peppers, weevil damage curbed, Apr-10
- Pesticides, database on Internet, Nov-23
- Phomopsis*, elusive fungus, Aug-21
- Pine shoot beetles damage Christmas trees, Dec-12
- Planter, senses soil moisture, Dec-17
- Plum Island Animal Disease Research Center, Dec-4
- Potato, hybrid resists PVY, Jul-23
- Potatoes, jasmine inhibits sprouting, Dec-21
- Poultry
  - automated inspection system, May-23
  - avian flu virus mutations, Jul-23
  - dead-virus Newcastle vaccines, Nov-16
  - leaner with amino acid feed, Feb-23

## R-S

- Rangeland
  - grazing, effects of, Jun-4, Sep-15
  - reseeding, Mar-12
- Rhizobia, world's largest collection, Mar-16
- Rhizotron, growth chamber, Oct-20
- Rice, flood-resistant, Oct-13
- Rice, germinating old seed, Mar-10
- Rubber, latex from common plants, Mar-22
- RUSLE, Revised Universal Soil Loss Equation, Aug-8, Sep-11
- Salmon, yeast-based pink color, Dec-21
- Satellites, improve farming, Jan-8
- Seeds, digitally imaging vigor, Aug-19
- Seeds, germination techniques, Mar-10
- Selenium, in human diet, Oct-18, 19
- Sheep
  - heat-tolerant St. Croix, Jun-9
  - scrapie and prion gene, Feb-4
  - study mimics range operations, Jun-4
- Silage, inoculant slows spoilage, Jun-17
- Snowflakes, SEM photographing, Apr-18
- Soil
  - better nitrogen estimates, Oct-9

- decontaminating with plants, Nov-2, 4
- earthy smell from microbes, Jun-16
- erosion control for steep sites, Aug-8
- root/soil interaction, rhizotrons, Oct-20
- universal loss equation revised, Sep-11
- Sorghum, changing day-length of, Dec-18
- Soy ink, more degradable, Jan-19
- Soybeans
  - crop simulations, Jan-23
  - disease-resistant Probst, Jul-23
  - more oil in new inks, Jan-19
- Starch, as tissue culture medium, Jul-11
- STEEP, soil erosion solutions, Aug-8
- Storage
  - controlled-atmosphere protocol, Feb-21
  - risks to stored grain, Jun-22
- Strawberries, hydroponic, Feb-10
- Strawberries, new early cultivars, Aug-23
- Sugars, bacterial, for dextrins, Jun-23
- Sunflowers, reducing cadmium, Jan-21
- Supercritical fluid, for fat extraction, Mar-18
- Swine, preventing *Atrophic rhinitis*, Nov-22
- Swine, PRRS virus less mysterious, Nov-22
- Systematics, better classification, May-2, 4

## T-V

- Take-all disease, of wheat, Aug-4
- Textiles

- cotton ginner's handbook, Jul-22
- decolorizing wastewater, Jul-10
- formaldehyde replacement, Jan-23
- microprocessor for ginning, Jan-11

## Tillage, in total darkness, Dec-10

- Tissue culture, on cornstarch gel, Jul-11
- Tomatoes, bioengineered, Jul-20
- Toxic metals, removal of, Sep-23, Nov-2, 4
- Tropical agriculture research, Jan-4
- Turkey hens, broodiness in, Nov-14
- Vetch, as vegetable mulch, May-10
- Viburnum, new leatherleaf, Nov-23

## W-Z

### Water

- global change and hydropower, Nov-23
- gullies disperse seed, Mar-15
- Klebsiella* degrades pesticides, Sep-23
- lake pollution/runoff reduced, Oct-23
- non-point-source pollution, Feb-22
- removing textile dyes, Jul-10
- snowflakes to predict supply, Apr-18
- toxic metals removed by GAC's, Sep-23
- using aquaculture wastewater, Feb-10
- vegetable oils clean wells, Jul-16
- Weed, aquatic, *Egeria densa*, Apr-12
- Weeds, reduced by night tillage, Dec-10
- Wheat
  - bred to perennial wheatgrass, Jan-13
  - dwarf bunt not in California, May-23
  - resistant to Hessian fly, Jun-23
  - stripper-header for harvest, Feb-22
  - take-all disease, Aug-4
  - why kernels sprout, Apr-23
  - with aphid resistance, May-23
- Whitefly, fungus may control, May-16
- WISE, women in science, engineering, Oct-12
- Zinc, in human diet, Jun-15